RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/768,932

Source: Two

Date Processed by STIC: 2/10/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY
FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT
MARK SPENCER, TELEPHONE: 703-308-4212; FAX: 703-308-4221
Effective 12/13/03: TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER VERSION 4.1 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
http://www.uspto.gov/web/offices/pac/checker/chkr41note.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to (EFFECTIVE 12/01/03):
   U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 10/08/03

Raw Sequence Listing Error Summary

ERROR DETECTED   **SUGGESTED CORRECTION**   SERIAL NUMBER: _10/768,932_

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1_____ Wrapped Nucleics / Wrapped Aminos — The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."

2_____ Invalid Line Length — The rules require that a line not exceed 72 characters in length. This includes white spaces.

3_____ Misaligned Amino Numbering — The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.

4_____ Non-ASCII — The submitted file was not saved in ASCII(DOS) text, as **required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.**

5_____ Variable Length — Sequence(s)_____contain n's or Xaa's representing more than one residue. **Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each** residue having variable length and indicate in the <220>-<223> section that some may be missing.

6_____ PatentIn 2.0 "bug" — A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**

7_____ Skipped Sequences (OLD RULES) — Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i)   SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.

8_____ Skipped Sequences (NEW RULES) — Sequence(s) _____ missing. **If intentional, please** insert the following lines for each skipped sequence.
<210> sequence id number
<400> sequence id number
000

9_____ Use of n's or Xaa's (NEW RULES) — Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

10_____ Invalid <213> Response — Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is **required** when <213> response is Unknown or is Artificial Sequence

11_____ Use of <220> — Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)

12_____ PatentIn 2.0 "bug" — Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

13_____ Misuse of n/Xaa — "n" can only represent a single <u>nucleotide</u>; "Xaa" can only represent a single <u>amino acid</u>

IFWO

RAW SEQUENCE LISTING   DATE: 03/10/2004
PATENT APPLICATION: **US/10/768,932**   TIME: 10:17:23

Input Set : **N:\Crf4\Refhold\10_folder\J768932.raw**
Output Set: **N:\CRF4\03092004\J768932.raw**

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 1 <110> APPLICANT: Glass, David J.
 2        Karow, Margaret
 3        Smith, Eric
 4 <120> TITLE OF INVENTION: HIV-Specific Fusion Proteins and
 5        Therapeutic and Diagnostic Methods For Use
 6 <130> FILE REFERENCE: REG 990A
 7 <140> CURRENT APPLICATION NUMBER: US/10/768,932
 8 <141> CURRENT FILING DATE: 2004-01-30
 9 <150> PRIOR APPLICATION NUMBER: US 60/446,347
10 <151> PRIOR FILING DATE: 2003-02-10
11 <160> NUMBER OF SEQ ID NOS: 18
12 <170> SOFTWARE: FastSEQ for Windows Version 4.0
14 <210> SEQ ID NO: 1
15 <211> LENGTH: 446
16 <212> TYPE: PRT
17 <213> ORGANISM: Artificial Sequence
18 <220> FEATURE:
19 <223> OTHER INFORMATION: Artificial Constructs
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23        Glu Pro Ser Gln Lys Ile Asn Val Lys Gln Ile Ala Ala Arg Leu Leu
24                    20                  25                  30
25        Thr Arg Gly Gly Ala Ile Ala Lys Lys Val Val Leu Gly Lys Lys Gly
26                    35                  40                  45
27        Asp Thr Val Glu Leu Thr Cys Thr Ala Ser Gln Lys Lys Ser Ile Gln
28            50                  55                  60
29        Phe His Trp Lys Asn Ser Asn Gln Ile Lys Ile Leu Gly Asn Gln Gly
30        65                  70                  75                  80
31        Ser Phe Leu Thr Lys Gly Pro Ser Lys Leu Asn Asp Arg Ala Asp Ser
32                        85                  90                  95
33        Arg Arg Ser Leu Trp Asp Gln Gly Asn Phe Pro Leu Ile Ile Lys Asn
34                    100                 105                 110
35        Leu Lys Ile Glu Asp Ser Asp Thr Tyr Ile Cys Glu Val Glu Asp Gln
36                    115                 120                 125
37        Lys Glu Glu Val Gln Leu Leu Val Phe Gly Leu Thr Ala Asn Ser Asp
38            130                 135                 140
39        Thr His Leu Leu Gln Gly Gln Ser Leu Thr Leu Thr Leu Glu Ser Pro
40        145                 150                 155                 160
41        Pro Gly Ser Ser Pro Ser Val Gln Cys Arg Ser Pro Arg Gly Lys Asn
42                        165                 170                 175
43        Ile Gln Gly Gly Lys Thr Leu Ser Val Ser Gln Leu Glu Leu Gln Asp
44                    180                 185                 190
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give source of genetic material (see item 11 on Error Summary Sheet)

Does Not Comply
Corrected Diskette Needed

pp 1-2, 4-5

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                RAW SEQUENCE LISTING              DATE: 03/10/2004
                PATENT APPLICATION:  US/10/768,932     TIME: 10:17:23

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46              195                     200                 205
47          Phe Lys Ile Asp Ile Val Val Leu Ala Ser Gly Asp Lys Thr His Thr
48              210                     215                 220
49          Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe
50          225                     230                 235             240
51          Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
52                          245                 250                 255
53          Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val
54                  260                     265                 270
55          Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
56              275                     280                 285
57          Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val
58              290                     295                 300
59          Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
60          305                     310                 315             320
61          Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser
62                          325                 330                 335
63          Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
64                  340                     345                 350
65          Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
66                  355                     360                 365
67          Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
68              370                     375                 380
69          Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
70          385                     390                 395             400
71          Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
72                          405                 410                 415
73          Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
74                  420                     425                 430
75          Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
76                  435                     440                 445
78  <210> SEQ ID NO: 2
79  <211> LENGTH: 450
80  <212> TYPE: PRT
81  <213> ORGANISM: Artificial Sequence
82  <220> FEATURE:
83  <223> OTHER INFORMATION: Artificial Constructs
84  <400> SEQUENCE: 2
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87          Lys Gly Asp Thr Val Glu Leu Thr Cys Thr Ala Ser Gln Lys Lys Ser
88                  20                      25                  30
89          Ile Gln Phe His Trp Lys Asn Ser Asn Gln Ile Lys Ile Leu Gly Asn
90                  35                      40                  45
91          Gln Gly Ser Phe Leu Thr Lys Gly Pro Ser Lys Leu Asn Asp Arg Ala
92              50                      55                  60
93          Asp Ser Arg Arg Ser Leu Trp Asp Gln Gly Asn Phe Pro Leu Ile Ile
94          65                      70                  75                  80
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95      Lys Asn Leu Lys Ile Glu Asp Ser Asp Thr Tyr Ile Cys Glu Val Glu
96                      85                  90                  95
97      Asp Gln Lys Glu Glu Val Gln Leu Leu Val Phe Gly Leu Thr Ala Asn
98                      100                 105                 110
99      Ser Asp Thr His Leu Leu Gln Gly Gln Ser Leu Thr Leu Thr Leu Glu
100                 115                 120                 125
101       Ser Pro Pro Gly Ser Ser Pro Ser Val Gln Cys Arg Ser Pro Arg Gly
102             130                 135                 140
103       Lys Asn Ile Gln Gly Gly Lys Thr Leu Ser Val Ser Gln Leu Glu Leu
104       145                 150                 155                 160
105       Gln Asp Ser Gly Thr Trp Thr Cys Thr Val Leu Gln Asn Gln Lys Lys
106                     165                 170                 175
107       Val Glu Phe Lys Ile Asp Ile Val Val Leu Ala Thr Arg Asp Tyr Gln
108                 180                 185                 190
109       Val Ser Ser Pro Ile Tyr Asp Ile Asn Tyr Tyr Thr Ser Glu Pro Ser
110                 195                 200                 205
111       Gln Lys Ile Asn Val Lys Gln Ile Ala Ala Arg Leu Leu Ser Gly Asp
112             210                 215                 220
113       Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly
114       225                 230                 235                 240
115       Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile
116                     245                 250                 255
117       Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu
118                 260                 265                 270
119       Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His
120                 275                 280                 285
121       Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg
122             290                 295                 300
123       Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys
124       305                 310                 315                 320
125       Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu
126                 325                 330                 335
127       Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr
128             340                 345                 350
129       Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu
130             355                 360                 365
131       Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp
132             370                 375                 380
133       Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val
134       385                 390                 395                 400
135       Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp
136                 405                 410                 415
137       Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His
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139       Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro
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141       Gly Lys
142             450
144 <210> SEQ ID NO: 3
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RAW SEQUENCE LISTING
PATENT APPLICATION: **US/10/768,932**

DATE: 03/10/2004
TIME: 10:17:23

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Output Set: **N:\CRF4\03092004\J768932.raw**

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146 <212> TYPE: PRT
147 <213> ORGANISM: Artificial Sequence
148 <220> FEATURE:
149 <223> OTHER INFORMATION: Artificial Constructs
150 <400> SEQUENCE: 3
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153     Glu Pro Ser Gln Lys Ile Asn Val Lys Gln Ile Ala Ala Arg Leu Leu
154                 20                  25                  30
155     Thr Arg Gly Gly Ala Ile Ala Thr Val Glu Leu Thr Cys Thr Ala Ser
156                 35                  40                  45
157     Gln Lys Lys Ser Ile Gln Phe His Trp Lys Asn Ser Asn Gln Ile Lys
158             50                  55                  60
159     Ile Leu Gly Asn Gln Gly Ser Phe Leu Thr Lys Gly Pro Ser Lys Leu
160     65                  70                  75                  80
161     Asn Asp Arg Ala Asp Ser Arg Arg Ser Leu Trp Asp Gln Gly Asn Phe
162                 85                  90                  95
163     Pro Leu Ile Ile Lys Asn Leu Lys Ile Glu Asp Ser Asp Thr Tyr Ile
164                 100                 105                 110
165     Cys Glu Val Glu Asp Gln Lys Glu Glu Val Gln Leu Leu Val Phe Gly
166                 115                 120                 125
167     Leu Thr Ala Asn Ser Asp Thr His Leu Leu Gln Gly Gln Ser Leu Thr
168             130                 135                 140
169     Leu Thr Leu Glu Ser Pro Pro Gly Ser Ser Pro Ser Val Gln Cys Arg
170     145                 150                 155                 160
171     Ser Pro Arg Gly Lys Asn Ile Gln Gly Gly Lys Thr Leu Ser Val Ser
172                 165                 170                 175
173     Gln Leu Glu Leu Gln Asp Ser Gly Thr Trp Thr Cys Thr Val Leu Gln
174                 180                 185                 190
175     Asn Gln Lys Lys Val Glu Phe Lys Ile Asp Ile Val Val Leu Ala Ser
176             195                 200                 205
177     Gly Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu
178     210                 215                 220
179     Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
180     225                 230                 235                 240
181     Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser
182                 245                 250                 255
183     His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
184                 260                 265                 270
185     Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
186                 275                 280                 285
187     Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
188             290                 295                 300
189    ·Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro
190     305                 310                 315                 320
191     Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
192                 325                 330                 335
193     Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
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194                   340              345              350
195       Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
196               355              360              365
197       Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
198           370              375              380
199       Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
200       385              390              395              400
201       Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
202               405              410              415
203       Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
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211  <213> ORGANISM: Artificial Sequence
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216       1               5               10               15
217       Glu Pro Ser Gln Lys Ile Asn Val Lys Gln Ile Ala Ala Arg Leu Leu
218               20              25              30
219       Thr Arg Gly Gly Ala Ile Ala Lys Lys Val Val Leu Gly Lys Lys Gly
220               35              40              45
221       Asp Thr Val Glu Leu Thr Cys Thr Ala Ser Gln Lys Lys Ser Ile Gln
222           50              55              60
223       Phe His Trp Lys Asn Ser Asn Gln Ile Lys Ile Leu Gly Asn Gln Gly
224       65              70              75              80
225       Ser Phe Leu Thr Lys Gly Pro Ser Lys Leu Asn Asp Arg Ala Asp Ser
226               85              90              95
227       Arg Arg Ser Leu Trp Asp Gln Gly Asn Phe Pro Leu Ile Ile Lys Asn
228               100             105             110
229       Leu Lys Ile Glu Asp Ser Asp Thr Tyr Ile Cys Glu Val Glu Asp Gln
230           115             120             125
231       Lys Glu Glu Val Gln Leu Leu Val Phe Gly Leu Thr Ala Asn Ser Asp
232           130             135             140
233       Thr His Leu Leu Gln Gly Gln Ser Leu Thr Leu Thr Leu Glu Ser Pro
234       145             150             155             160
235       Pro Gly Ser Ser Pro Ser Val Gln Cys Arg Ser Pro Arg Gly Lys Asn
236               165             170             175
237       Ile Gln Gly Gly Lys Thr Leu Ser Val Ser Gln Leu Glu Leu Gln Asp
238               180             185             190
239       Ser Gly Thr Trp Thr Cys Thr Val Leu Gln Asn Gln Lys Lys Val Glu
240           195             200             205
241       Phe Lys Ile Asp Ile Val Val Leu Ala Ser Gly Phe Gln Lys Ala Ser
242           210             215             220
243       Ser Ile Val Tyr Lys Lys Glu Gly Glu Gln Val Glu Phe Ser Phe Pro
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The types of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

VERIFICATION SUMMARY

DATE: 03/10/2004

PATENT APPLICATION: **US/10/768,932**

TIME: 10:17:24

Input Set : **N:\Crf4\Refhold\10_folder\J768932.raw**

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